



(12) **EUROPEAN PATENT APPLICATION**

(88) Date of publication A3:
28.08.2002 Bulletin 2002/35

(51) Int Cl.⁷: **H04L 29/06, G06F 1/00**

(43) Date of publication A2:
04.04.2001 Bulletin 2001/14

(21) Application number: **00203266.2**

(22) Date of filing: **20.09.2000**

(84) Designated Contracting States:
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU
MC NL PT SE
Designated Extension States:
AL LT LV MK RO SI

(30) Priority: **24.09.1999 US 155853 P**

(71) Applicant: **Citicorp Development Center, Inc.**
Los Angeles, California 90066 (US)

(72) Inventors:
• **Grandcolas, Michael L.**
Santa Monica, CA 90405 (US)
• **Law, France**
Los Angeles, CA 90034 (US)

- **Doshi, Ashwin**
Cerritos, CA 90703 (US)
- **Williams, Michael**
Thousand Oaks, CA 91362 (US)
- **Jang, Yeona**
Princeton, NJ 08540 (US)
- **Merschen, Toni**
White Plains, NY 10605 (US)
- **Pan, Jack**
Rowland Heights, CA 91748 (US)

(74) Representative: **Hynell, Magnus**
Hynell Patenttjänst AB,
Patron Carls väg 2
683 40 Hagfors/Uddeholm (SE)

(54) **Method and system for single sign-on user access to multiple web servers**

(57) Methods and systems for single sign-on user access to multiple web servers are provided. A user is authenticated at a first web server (e.g., by user name and password). The first web server provides a web page to the user having a service selector (e.g., a hyperlink comprising the URL of a second web server offering the service indicated by the selector). When the user activates the service selector, the first web server constructs and transmits an encrypted authentication

token (e.g., a cookie) from the first web server to a second web server via the user client. The first and second web servers share a sub-domain. The authentication token comprises an expiration time and is digitally signed by the first web server and is authenticated at the second web server. Upon authentication, the second web server allows the user to conduct a session at the second web server.



European Patent
Office

EUROPEAN SEARCH REPORT

Application Number
EP 00 20 3266

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.7)
X	J. S. PARK: "Secure Attribute services on the Web" 'Online! June 1999 (1999-06), GEORGE MASON UNIVERSITY, FAIRFAX, VIRGINIA XP002190891 Retrieved from the Internet: <URL: http://www.list.gmu.edu/dissert/diss-jean.pdf> 'retrieved on 2002-02-21!	1-9, 15-23, 25-33, 39-47	H04L29/06 G06F1/00
Y	Chapter 4, Figures A.1-A.10,	10-12, 24, 34-36, 48	
Y	ANSELM BAIRD-SMITH (ABAIRO@WWW18.W3.ORG): "Re: URLEncoder, where is the URLDecoder?" INTERNET NEWSGROUP, 'Online! 29 April 1996 (1996-04-29), XP002191148 comp.lang.java Retrieved from the Internet: <URL:http://groups.google.com/> 'retrieved on 2002-02-21! * the whole document *	10-12, 34-36	
Y	EP 0 913 789 A (SUN MICROSYSTEMS INC) 6 May 1999 (1999-05-06) * claims 1,2 *	24, 48	TECHNICAL FIELDS SEARCHED (Int.Cl.7) H04L
X	JOON S. PARK: "A Secure Cookie Recipe for Electronic Transactions" 1999 U.S.-KOREA CONFERENCE (UKC) ON SCIENCE, TECHNOLOGY, ENTREPRENEURSHIP, AND LEADERSHIP, , 'Online! 12 - 14 August 1999, XP002191149 UCLA, Los Angeles, California Retrieved from the Internet: <URL:http://citeseer.nj.nec.com/park99securecookie.html> 'retrieved on 2002-02-21!	1-9	
Y	* the whole document *	15-33, 39-48	
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 28 June 2002	Examiner Bertolissi, E
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document		T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document	

EPO FORM 1503 02.82 (F04C01)



European Patent
Office

EUROPEAN SEARCH REPORT

Application Number
EP 00 20 3266

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.7)
Y	WO 99 20060 A (DSC TELECOM LP) 22 April 1999 (1999-04-22) * page 34, line 1 - page 35, line 5 * -----	15-33, 39-48	
			TECHNICAL FIELDS SEARCHED (Int.Cl.7)
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 28 June 2002	Examiner Bertolissi, E
<p>CATEGORY OF CITED DOCUMENTS</p> <p>X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document</p> <p>T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document</p>			

EPO FORM 1503 03.82 (P04001)

**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

EP 00 20 3266

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on
The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

28-06-2002

Patent document cited in search report		Publication date	Patent family member(s)		Publication date
EP 0913789	A	06-05-1999	EP	0913789 A2	06-05-1999
			JP	11265411 A	28-09-1999
WO 9920060	A	22-04-1999	US	6243451 B1	05-06-2001
			AU	9514398 A	03-05-1999
			EP	1020088 A1	19-07-2000
			WO	9920060 A1	22-04-1999